

REMARKS

Responsive to the outstanding Office Action, applicant has carefully studied the Examiner's rejections and the comments relative thereto. Favorable reconsideration of the application is respectfully requested in light of the amendments and following detailed arguments.

In this response, claim 2 has been canceled, and claims 1, 12, 21, 31 and 34 have been amended. Claim 37 was previously cancelled. Claims 12 and 31 were amended to correct typographical errors. It is respectfully submitted that no new matter has been presented in this amendment.

The Examiner objected to the specification for failing to include subject headings, as suggested by 37 CFR 1.77(b). In response thereto, the specification has been amended herein to include appropriate subject headings. It is therefore requested that this objection be reconsidered and withdrawn.

Claims 1, 3, 10-16, 20-22, 25-30 and 34-36 were rejected under 35 USC §102(e) as being anticipated by US 5,965,246 to Guiselin et al. Claims 1-19 and 36 were rejected under 35 USC §103 as being unpatentable over US 5,935,702 to Macquart in view of Guiselin. Claims 20-35 were rejected under 35 USC 102(e) as anticipated by or, alternatively, under 35 USC 103 as obvious over Macquart.

Before discussing the prior art in detail, applicants wish to review the present invention as disclosed in independent claims 1 and 21. Claim 1 discloses a process for the production of a heat-treatable low emissivity coated glass. The process comprises depositing an underlayer onto a glass substrate by a pyrolytic deposition process, and subsequently depositing a reflective metal layer by a vacuum deposition method, directly on the underlayer.

Claim 21 discloses a heat-treatable low emissivity coated glass comprising a glass substrate having a multilayer coating on one surface. The multilayer coating comprises a pyrolytically deposited underlayer, a vacuum deposited reflective metal layer that is deposited directly on the underlayer, and a vacuum deposited anti-reflection layer.

Guiselin discloses a glass substrate coated with a stack of thin layers. At least one of the layers reflects in the infrared or solar radiation range and comprises a dielectric material. This dielectric layer is disposed between first and second coatings. An interlayer with a refractive layer less than that of the substrate is interposed between the substrate and the coating stack.

Macquart discloses a transparent glass substrate, provided with a stack of thin layers having at least one metallic layer having properties in the infrared range, particularly having low emissivity. Two coatings having a base of dielectric material located one under and the other over the layer also have properties in the infrared range. A protective metallic layer is placed immediately over an in contact with the layer having properties in the infrared range. In order to prevent the modification of properties of the stack, particularly optical and thermal properties, in the case where the substrate is submitted to a thermal treatment of the tempering or bending kind, the second coating having a base of dielectric material, includes a barrier layer for the diffusion of oxygen of a thickness of at least 10 nanometers and preferably of at least 20 nanometers, and further, the layer having properties in the infrared range is directly in contact with the underlying dielectric coating.

The novelty of claim 1 over the applied references can readily be appreciated by a review of the Figures which are part of the abstract. Macquart discloses a coating comprising a barrier layer 2; a primer layer 3; a silver layer 4; a sacrificial layer 5; a dielectric 6 and a barrier layer 7. Guiselin discloses essentially the same stack comprising an interlayer 2; a dielectric 3; a silver layer 4; a thin protective layer 5 and a second dielectric layer 6. Neither of the citations contemplates a coating in which the silver is deposited upon an underlayer which is itself deposited directly onto the glass. As recited above, the process of amended claim 1 comprises depositing an underlayer onto a glass substrate by a pyrolytic deposition process, and subsequently *depositing a reflective metal layer* by a vacuum deposition method, *directly on the underlayer*. It is thus submitted that claim 1 is not anticipated by Guiselin under 35 USC §102. Claim 21 discloses a vacuum deposited reflective metal layer that is deposited directly on the underlayer. As discussed above, Macquart does not anticipate this layer. Thus, claim 21 is not anticipated by Macquart. Claim 20 discloses a glass article made by the process of claim 1, which, as stated above, requires *depositing a reflective metal layer directly on the underlayer*. It

is therefore respectfully submitted that claim 20, which depends from amended claim 1, is also not anticipated by the Macquart reference. Therefore, it is respectfully submitted that the rejections under 35 USC §102 should be reconsidered and withdrawn.

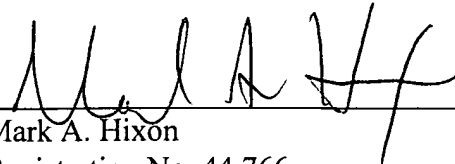
With regard to the rejections of claims 1-19 and 36 under 35 USC §103, applicants have discovered that depositing the silver directly on the underlayer results in coatings which offer improved properties particularly when subjected to heat treatment. The underlayer is a layer which has been deposited by a pyrolytic deposition process.

The Examiner notes that both references mention the possibility of depositing coatings by a pyrolytic deposition process. However, it is respectfully submitted that neither reference exemplifies such a process or offers any incentive for doing so. The possibility of using pyrolytic deposition processes is thus nothing more than a throw away line. There is no indication that using such a process might enable an advantageous modification to the coating which is deposited on top of the underlayer. Applicants have discovered that the reflective silver layer can be deposited directly onto an underlayer which has been deposited using a pyrolytic deposition process. Such processes offer advantage in that the pyrolytic deposition can be carried out on line during the float process (and indeed the coating exemplified in the application is produced using an existing Pilkington process) and the subsequent off line coating uses one less coating step which offers cost advantages. It is therefore submitted that only in light of the present disclosure would one skilled in the art be motivated to combine the teachings of Macquart and Guiselin in order to attempt to obtain the present invention as disclosed herein. Further, even if one was so motivated, it is submitted that no reasonable combination of the applied references would yield the present invention as disclosed in the independent claims herein.

For the reasons above, it is submitted that independent claims 1 and 21 are allowable over the applied art of record. The remaining claims are believed to be allowable based, at least, upon their dependence from allowable base claims as shown above.

Should the Examiner wish to modify any of the language of the claims, applicants' attorney suggests a telephone interview in order to expedite the prosecution of the application.

Respectfully submitted,



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